

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

DRAFT

Conditional Major/ Operating

Permit: F-08-027

PILKINGTON NORTH AMERICA, INC.

VERSAILLES, KY

November 7, 2008

ESMAIL HASSANPOUR, REVIEWER

SOURCE ID: 21-239-00015

AGENCY INTEREST: 4245

ACTIVITY: APE20080002

SOURCE DESCRIPTION:

Pilkington North American, Inc. applied to the Kentucky Division for Air Quality on July 31, 2008, to renew their permit in Versailles, KY. The source currently holds operating permit F-02-023 R2, for their automotive glass fabrication. The facility operates three 16.7 MMBtu/hr Cleaver Brooks natural gas fired steam boilers, and process lines for printing, cleaning, painting, hardware assembly, and cutting of the windshields. Blanks are cut to size and laminated together to form the finished windows and processed through an autoclave. The source uses both silk-screen and hand brush processes to apply paint to the windows. The facility is a Conditional Major Source under 401 KAR 52:030 due to federally enforceable permit limits that keep individual HAP emissions below 9 tons per year, combined HAPs emissions below 22.5 tons per year, and VOC emissions below 90 tons per year.

APPLICABLE REGULATIONS:

401 KAR 63:010, Fugitive emissions is applicable to each affected facility which emits or may emit fugitive emissions and is not elsewhere subject to an opacity standard within the administrative regulations of the Division for Air Quality.

401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hr and commenced on or after April 9, 1972.

SIGNIFICANT UNITS:

Emissions Unit: 01-03 Three Natural Gas Indirect Heat Exchangers 1987

Pursuant to 401 KAR 59:015, Section 4(1)(c), particulate emissions from each unit shall not exceed 0.38 lb/MMBtu. The permittee may assure compliance with the particulate allowable by calculating emissions using the following formula: Combusting natural gas: $[7.6 \times 10^{-6} \text{ lb/scf}^*$ divided by (natural gas heating value in MMBtu/scf)].

Opacity shall not exceed 20 percent except:

- 1) That a maximum of forty (40) percent opacity from each unit shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot. [401 KAR 59:015 Section 4(2)(b)].

- 2) During building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015 Section 4(2)(b)].

Pursuant to 401 KAR 59:015, Section 5(1)(c) 1, sulfur dioxide emissions from each unit shall not exceed 1.55 lb/MMBtu. The permittee may assure compliance with the sulfur dioxide allowable by calculating emissions using the following formula: combustion natural gas: $[0.6 \times 10^{-6} \text{ lb/scf} \times \text{divided by (natural gas heating value in MMBtu/scf)}]$.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall monitor the hours of operation and the amount of fuel burned in monthly basis.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain the record of the hours of operation and the amount of fuel burned on a monthly basis.

Emissions Unit: 04 (04, 06, 10-, 17) Printer and Cleaner Operations, 1987-1995

Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain the records of amounts of HAP/VOC containing material on a monthly basis.

Pursuant to 401 KAR 52:030, Section 26, a rolling twelve (12) month total summary showing tons of HAP/VOCs emitted shall be kept.

Pursuant to 401 KAR 52:030, Section 26, all purchase orders and invoices for materials containing HAP/VOCs shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the individual HAP emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the combined HAP/VOCs emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of individual HAPs for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of combined HAP/VOCs for each month in the semi-annual period.

Compliance Demonstration Method:

Monthly HAP/VOC emissions = Sum of [(monthly usage of each HAP/VOC containing material) multiplied by (HAP/VOC fraction of the material)].

Emission Unit: 05 Silver Painting Operations, 1987

Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain the records of amounts of HAP/VOC containing material on a monthly basis.

Pursuant to 401 KAR 52:030, Section 26, a rolling twelve (12) month total summary showing tons of HAP/VOCs emitted shall be kept.

Pursuant to 401 KAR 52:030, Section 26, all purchase orders and invoices for materials containing HAP/VOCs shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the individual HAP emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the combined HAP/VOCs emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of individual HAPs for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of combined HAP/VOCs for each month in the semi-annual period

Compliance Demonstration Method:

Monthly HAP/VOC emissions = Sum of [(monthly usage of each HAP/VOC containing material) multiplied by (HAP/VOC fraction of the material)].

Emissions Unit: 14 Hardware Assembly, 1991

Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain the records of amounts of HAP/VOC containing material on a monthly basis.

Pursuant to 401 KAR 52:030, Section 26, a rolling twelve (12) month total summary showing tons of HAP/VOCs emitted shall be kept.

Pursuant to 401 KAR 52:030, Section 26, all purchase orders and invoices for materials containing HAP/VOCs shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the individual HAP emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the combined HAP/VOCs emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of individual HAPs for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of combined HAP/VOCs for each month in the semi-annual period

Compliance Demonstration Method:

Monthly HAP/VOC emissions = Sum of [(monthly usage of each HAP/VOC containing material) multiplied by (HAP/VOC fraction of the material)].

Emissions Unit 18: Autoclave

Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain the records of amounts of HAP/VOC containing material on a monthly basis.

Pursuant to 401 KAR 52:030, Section 26, a rolling twelve (12) month total summary showing tons of HAP/VOCs emitted shall be kept.

Pursuant to 401 KAR 52:030, Section 26, all purchase orders and invoices for materials containing HAP/VOCs shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the individual HAP emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the combined HAP/VOCs emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of individual HAPs for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of combined HAP/VOCs for each month in the semi-annual period

Compliance Demonstration Method:

Monthly HAP/VOC emissions = Sum of [(monthly usage of each HAP/VOC containing material) multiplied by (HAP/VOC fraction of the material)].

Emissions Unit 21 Windshield Cutting Lines (7), 1987

Pursuant to 401 KAR 52:030, Section 26, the permittee shall maintain the records of amounts of HAP/VOC containing material on a monthly basis.

Pursuant to 401 KAR 52:030, Section 26, a rolling twelve (12) month total summary showing tons of HAP/VOCs emitted shall be kept.

Pursuant to 401 KAR 52:030, Section 26, all purchase orders and invoices for materials containing HAP/VOCs shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the individual HAP emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the combined HAP/VOCs emission calculation for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of individual HAPs for each month in the semi-annual period.

Pursuant to 401 KAR 52:030, Section 26, the permittee shall report the rolling twelve (12) month total of combined HAP/VOCs for each month in the semi-annual period

Compliance Demonstration Method:

Monthly HAP/VOC emissions = Sum of [(monthly usage of each HAP/VOC containing material) multiplied by (HAP/VOC fraction of the material)].

EMISSION AND OPERATING CAPS DESCRIPTION:

To preclude the applicability of 401 KAR 52:020, the total HAP emissions shall not exceed 9.0 tons per year of any single or 22.5 tons per year of a combination of HAPs. Total VOC emissions shall not exceed 90 tons per year. The annual limitations shall not be exceeded during any consecutive twelve (12) month period for the entire source.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.